## CONSERVATION



## Sioux City Couple Protecting 'Fragile Giants'

Jason Johnson, Public Affairs Specialist, December 2010

For Sioux City's Sandy Fravel, life really does imitate art. A mid-1990s exhibit at the Sioux City Art Center taught Fravel, the Center's former education curator, how fragile western Iowa's Loess Hills really are.

The Sioux City Art Center ran an exhibit called "Land of the Fragile Giants – Landscapes & Environments of the Loess Hills" from 1994-96, which included a collaboration of paintings, photographs, videos and sculptures. As education curator, Fravel trained tour guides and educational programmers. "I learned so much about the Loess Hills doing research and studying the artwork," said Sandy.

Her newfound interest and passion in this unique landscape drew her to purchase and restore more than 300 acres of damaged and overgrazed Loess Hills prairie in southwest Plymouth County, and where she eventually built her home.

Along with her husband, Ed, Fravel cleared eastern red cedar trees and other brush that encroached on their land before Sandy purchased it 12 years ago. Additionally, the Fravels recently placed a large portion of their property in a 20-year rental agreement through the USDA that insures the land will remain managed grassland instead of conversion to row crops or a housing development.

The Loess Hills of western Iowa are one of the state's seven major topographic regions, and one of Iowa's most unique landscapes. The steep, sharply ridged hills extend in a narrow band along the length of the Missouri River valley. The Loess Hills are



Sandy and Ed Fravel have worked hard for more than a decade to restore about 300 acres of Loess Hills prairie.

named for the loose, crumbly "loess" soils that lie beneath. They are home to rare native plant species.

The Fravels have a couple goals for their land: to remove as many invasive eastern red cedar trees as possible to restore the prairie and attract wildlife; and to provide adequate grazing lands for cattle, without overgrazing.

## Cedar Removal

Invasive eastern red cedar trees are a problem all along the Loess Hills region. These trees grow quickly and shade out native



prairie, killing grasses and plant life which leaves the soil susceptible to erosion. Before this region developed, natural fire helped suppress these types of invaders.

Shortly after purchasing the property, the Fravels used chainsaws to clear about 5,000 trees. "We worked really hard to remove the trees. We even bribed our grandchildren to help us," said Sandy, "but it was just too much work on our own."

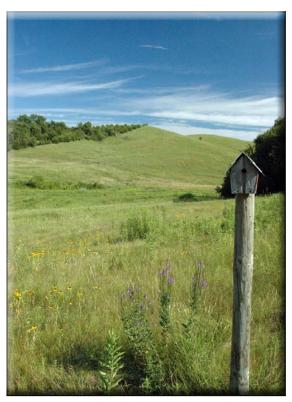
The couple heard about a USDA native prairie restoration project through the local Sioux Rivers Resource Conservation and Development (RC&D) in 2002 that paid financial assistance for a contractor to clear trees and brush. The project provided a good start, but it was obvious more clearing needed to be done.

In 2008, the Fravels signed a contract through the USDA's Wildlife Habitat Incentives Program (WHIP) – a program administered by the Natural Resources Conservation Service (NRCS) that provides financial assistance to establish wildlife habitat. This time cedar trees and brush were cleared on 172 acres using special shears, or scissors, attached to a skid loader to cut the trees off at the base. Measures were then taken – using both chemicals and prescribed burns – to prevent tree re-growth.

It didn't take long for the Fravels to see results. Once the trees were removed, Sandy



Piles of sheared red cedar trees can be seen on the Fravel's Loess Hills slopes. Removal of these trees is allowing the native prairie plants and grasses to grow back naturally.



Where the line of eastern red cedars stops on the hill indicates where the Fravels property line begins and shows off the work they have done to get rid of this invasive tree.

says she began to see many of the unique plant species she learned about at the art exhibit. "I have seen how Yucca plants grow on certain slopes, plus I've seen coneflowers, compass plants, big and little bluestem, and sideoats gramma," she said. "It's amazing how humans and livestock can impact the land – these hills really are fragile giants."

The WHIP contract also included the installation of 1,600 feet of fence to enclose about a 30-acre wildlife area away from grazing cattle. The Fravels are doing what they can to attract wildlife to their land, including constructing bluebird boxes, wood duck boxes, a grass buffer and fence around their pond and Canadian Geese nesting areas in the pond. "It is fascinating to watch the Canadian Geese nest – to see the male protect against incoming geese – they are very protective," she said. "It's things like that we get to see that others don't get to see living in town."

In 2010, the Fravels once again utilized the USDA's WHIP to remove invasive cedar trees and brush from 143 additional acres. They also planted 1,400 fruit-bearing trees and shrubs on their own to attract more wildlife.



## **Grazing Land**

The Fravels, like many Loess Hills landowners, allow cattle to graze their land. Ed Fravel says their renter grazes about 50 cow/calf pairs. A 20-year rental agreement signed in 2009 through the NRCS-administered Grassland Reserve Program (GRP) requires a grazing management plan that addresses resource concerns. The wildlife-friendly plan includes restrictions on haying, mowing or harvesting for seed production during the nesting season for grassland birds in the local area that are in significant decline.

In Iowa, haying, seed harvest or grazing activities are not permitted on 20 percent of the contract acres during the nesting season of June 1 – July 15 on warm and cool season grasses to promote use by wildlife.

"We are careful not to allow overgrazing," said Sandy. "We keep a close eye on the grass, and get the cattle off when it's time."

For more information about conservation practices and programs to help you attract more wildlife, visit www.ia.nrcs.usda.gov.



A scenic view from atop the Fravel's Loess Hills property in southwest Plymouth County near Sioux City.



A common Iowa native prairie plant, the Blackeyed Susan, grows naturally in the Fravel's backyard.